

Claims

1. A method of analyzing the interaction of a molecule A and a molecule B that exhibits a specific interaction with the molecule A, which comprises at least the following steps:
 - (1) a step of preparing a molecule A-immobilized solid phase support mixture by binding a molecule A to a solid phase support without specifying the binding position on the molecule A side,
 - 10 (2) a step of bringing a sample containing or not containing a molecule B into contact with the solid phase support mixture prepared in (1) above, and
 - (3) a step of identifying a molecule that has exhibited or has not exhibited a specific interaction with the molecule A, and
 - 15 analyzing the interaction of the molecule A and the molecule B.
2. The method of claim 1, which comprises introducing a spacer between the molecule A and the solid phase support, without specifying the introduction position on the molecule A side, in
20 the step of preparing the molecule A-immobilized solid phase support mixture.
3. The method of claim 1, wherein (1) a functional group is introduced to the molecule A, and (2) the introduction of the
25 functional group is conducted without specifying the introduction position on the molecule A side, in the step of preparing the molecule A-immobilized solid phase support mixture.
- 30 4. The method of claim 2, wherein the introduction of the spacer to the molecule A is conducted via a functional group introduced without specifying the introduction position on the molecule A side.

5. The method of claim 3 or claim 4, wherein the introduction of the functional group to the molecule A without specifying the introduction position on the molecule A side is based on a chemical reaction or an enzymatic reaction.

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6. The method of claim 5, wherein the introduction of the functional group to the molecule A without specifying the introduction position on the molecule A side is based on an enzymatic reaction.

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7. The method of claim 6, wherein the enzymatic reaction is conducted using a metabolic enzyme.

8. A method of selecting a molecule B that exhibits a specific
15 interaction with a molecule A; which comprises at least the following steps:

(1) a step of preparing a molecule A-immobilized solid phase support mixture by binding a molecule A to a solid phase support without specifying the binding position on the molecule
20 A side,

(2) a step of bringing a sample containing or not containing a molecule B into contact with the solid phase support mixture prepared in (1) above, and

(3) a step of identifying a molecule that has exhibited or has
25 not exhibited a specific interaction with the molecule A, and selecting the molecule B.

9. The method of claim 8, which comprises introducing a spacer between the molecule A and the solid phase support, without
30 specifying the introduction position on the molecule A side, in the step of preparing the molecule A-immobilized solid phase support mixture.

10. The method of claim 8, wherein (1) a functional group is

introduced to the molecule A, and (2) the introduction of the functional group is conducted without specifying the introduction position on the molecule A side, in the step of preparing the molecule A-immobilized solid phase support
5 mixture.

11. The method of claim 9, wherein the introduction of the spacer to the molecule A is conducted via a functional group introduced without specifying the introduction position on the
10 molecule A side.

12. The method of claim 10 or claim 11, wherein the introduction of the functional group to the molecule A without specifying the introduction position on the molecule A side is
15 based on a chemical reaction or an enzymatic reaction.

13. The method of claim 12, wherein the introduction of the functional group to the molecule A without specifying the introduction position on the molecule A side is based on an
20 enzymatic reaction.

14. The method of claim 13, wherein the enzymatic reaction is conducted using a metabolic enzyme.

25 15. A molecule A-immobilized solid phase support mixture comprising two or more kinds of molecule A-immobilized solid phase supports prepared by binding a molecule A to solid phase supports without specifying the binding position on the molecule A side, wherein said two or more kinds of molecule A-
30 immobilized solid phase supports have the molecule A immobilized thereto at respective different positions on the molecule A.

16. The molecule A-immobilized solid phase support mixture of

claim 15, wherein the binding of the molecule A to the solid phase support is conducted via a spacer introduced between the molecule A and the solid phase support without specifying the introduction position on the molecule A side.

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17. The molecule A-immobilized solid phase support mixture of claim 15, wherein (1) the binding of the molecule A to the solid phase support is conducted via a functional group introduced to the molecule A, and (2) the introduction of the
10 functional group is conducted without specifying the introduction position on the molecule A side.

18. The molecule A-immobilized solid phase support mixture of claim 16, wherein the introduction of the spacer to the
15 molecule A is conducted via a functional group introduced without specifying the introduction position on the molecule A side.

19. The molecule A-immobilized solid phase support mixture of
20 claim 17 or claim 18, wherein the introduction of the functional group to the molecule A without specifying the introduction position on the molecule A side is based on a chemical reaction or an enzymatic reaction.

25 20. The molecule A-immobilized solid phase support mixture of claim 19, wherein the introduction of the functional group to the molecule A without specifying the introduction position on the molecule A side is based on an enzymatic reaction.

30 21. The molecule A-immobilized solid phase support mixture of claim 20, wherein the enzymatic reaction is conducted using a metabolic enzyme.

22. The molecule A-immobilized solid phase support mixture of

any one of claim 15 to claim 21, which is a solid phase support for affinity chromatography.

23. A production method for a solid phase support for affinity
5 chromatography comprising binding a molecule A to a solid phase support without specifying the binding position on the molecule A side, and preparing a molecule A-immobilized solid phase support mixture comprising two or more kinds of molecule A-immobilized solid phase supports, wherein said two or more
10 kinds of molecule A-immobilized solid phase supports have the molecule A immobilized thereto at respective different positions on the molecule A.

24. The production method of claim 23 for a solid phase support
15 for affinity chromatography, wherein the binding of the molecule A to the solid phase support is conducted via a spacer introduced between the molecule A and the solid phase support without specifying the introduction position on the molecule A side.

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25. The production method of claim 23 for a solid phase support for affinity chromatography, wherein (1) the binding of the molecule A to the solid phase support is conducted via a functional group introduced to the molecule A, and (2) the
25 introduction of the functional group is conducted without specifying the introduction position on the molecule A side.

26. The production method of claim 24 for a solid phase support for affinity chromatography, wherein the introduction of the
30 spacer to the molecule A is conducted via a functional group introduced without specifying the introduction position on the molecule A side.

27. The production method of claim 25 or claim 26 for a solid

phase support for affinity chromatography, wherein the introduction of the functional group to the molecule A conducted without specifying the introduction position on the molecule A side is based on a chemical reaction or an enzymatic
5 reaction.

28. The production method of claim 27 for a solid phase support for affinity chromatography, wherein the introduction of the functional group to the molecule A conducted without specifying
10 the introduction position on the molecule A side is based on an enzymatic reaction.

29. The production method of claim 28 for a solid phase support for affinity chromatography, wherein the enzymatic reaction is
15 conducted using a metabolic enzyme.

30. A screening method for a molecule B that exhibits a specific interaction with a molecule A, which comprises at least (1) a step of bringing a sample containing or not
20 containing a molecule B into contact with the molecule A-immobilized solid phase support mixture of any one of claim 15 to claim 22, and (2) a step of identifying a molecule that has exhibited or has not exhibited a specific interaction with the molecule A, and selecting the molecule B.

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